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Fairmont, WV, 26554. **Is the water quality of local streams affected by marcellus shale drilling?**

Throughout recent years, the water quality near Marcellus Shale drill sites has been questioned. The hypothesis of the experiment was that the surface water quality would be negatively affected by Marcellus Shale Drilling. The abiotic properties tested were pH, turbidity, % total dissolved solids, conductivity, and redox potential for above and below the drilling sites for all the creeks. Benthic macroinvertebrates from each sight were collected from each site to draw comparisons, and *Daphnia magna* were exposed to water samples obtained from each one of the stream locations. A fecal coliform test was also administered for each water sample. The results of the water quality test were obtained from the above sites and compared to the corresponding below sites. Some conclusive results were obtained from the *daphnia magna* exposure test when the *Daphnia magna* placed in the water obtained from the cherry camp road below site had a much less survival rate than the water fleas exposed to the same creek water above the drilling site as did both Franks Run locations. Even though some locations showed negative effects, the results obtained did not allow a strict conclusion to be drawn in regards to whether or not all drill sites were detrimental to the quality of the surface water in the Harrison, Wetzel, and Doddridge County areas due to variation.